

### Amendments of the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

#### Listing of Claims:

1. (currently amended) Light-storage self-luminescent glass, comprising from 0.01% to 40% by weight of a light-storage self-luminescent material activated by multiple ions and from 99.99% to 60% by weight of a matrix glass; wherein the light-storage self-luminescent material has a particle size from ~~10  $\mu$ m~~ 0.55  $\mu$ m to 20  $\mu$ m, and the matrix glass is selected from the group consisting of low melting point glass or common silicate glass, ~~and other conventional~~ borate glass, phosphate glass, halide glass, sulfide glass and aluminate glass.

2. (original) Light -storage self-luminescent glass according to claim 1, wherein the chemical formula of the light-storage self-luminescent material activated by multiple ions is:



wherein M is one or more selected from the group consisting of Sr, Ca, Ba and Zn;

M' is one or more selected from the group consisting of Mg, Cd and Be;

R is  $B_2O_3$ ,  $P_2O_5$  or mixture thereof;

Ln is one or more selected from the group consisting of Nd, Dy, Ho, Tm, La, Pr, Tb, Ce, Er, Mn, Bi, Sn and Sb; and

$\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$ , x and y are molar coefficients meeting following requirement:  $0.6 \leq \alpha \leq 6$ ;  $0 \leq \beta \leq 5$ ;  $1 \leq \gamma \leq 9$ ;  $0 \leq \delta \leq 0.7$ ;  $0.00001 \leq x \leq 0.2$ ;  $0 \leq y \leq 0.3$ .

3. (original) Light -storage self-luminescent glass according to claim 2, wherein the main chemical formula of the light-storage self-luminescent material activated by multiple ions is:

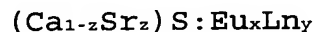


wherein Ln is one or more selected from the group consisting of La, Ce, Dy, Tm, Ho, Nd, Er, Sb and Bi;

z is a coefficient:  $0 \leq z \leq 1$ ; and

x and y are molar coefficients:  $0.0001 \leq x \leq 0.2$ ;  $0.0001 \leq y \leq 3.0$ .

4. (original) Light -storage self-luminescent glass according to claim 1, wherein the chemical formula of the light-storage self-luminescent material activated by multiple ions is:

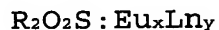


wherein Ln is one or more selected from the group consisting of Er, Dy, La, Tm and Y;

z is a coefficient:  $0 \leq z \leq 1$ ; and

x and y are molar coefficients meeting following requirement:  $0.00001 \leq x \leq 0.2$ ;  $0.00001 \leq y \leq 0.15$ .

5. (original) Light -storage self-luminescent glass according to claim 1, wherein the chemical formula of the light-storage self-luminescent material activated by multiple ions is:



wherein R is one or more selected from the group consisting of Y, La and Gd;

Ln is one or more selected from the group consisting of Er, Cr, Bi, Dy, Tm, Ti, Mg, Sr, Ca, Ba and Mn; and

x and y are molar coefficients meeting

following requirement:  $0.00001 \leq x \leq 0.2$ ;  $0.00001 \leq y \leq 0.6$ .

6. (original) Light -storage self-luminescent glass according to claim 1, wherein the chemical formula of the light-storage self-luminescent material activated by multiple ions is:



wherein M is one or more selected from the group consisting of Mg, Ca, Sr and Zn;

Ln is one or more selected from the group consisting of Nd, Dy, Ho, Tm, La, Ce, Er, Pr and Bi; and

$\alpha$ ,  $\beta$ ,  $\gamma$ ,  $x$  and  $y$  are molar coefficients meeting following requirement:  $0.5 \leq \alpha \leq 6$ ;  $0.5 \leq \beta \leq 9$ ;  $0 \leq \gamma \leq 0.3$ ;  $0.00001 \leq x \leq 0.15$ ;  $0.00001 \leq y \leq 0.2$ .

7. (original) Light -storage self-luminescent glass according to claim 6, the chemical formula of the light-storage self-luminescent material is:

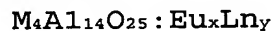


wherein Ln is one or more selected from the group consisting of La, Ce, Dy, Ho, Nd and Er;

M is one or more selected from the group consisting of Sr, Ca, Mg and Zn; and

$x$  and  $y$  are molar coefficients:  $0.0001 \leq x \leq 0.15$ ;  $0.0001 \leq y \leq 0.2$ .

8. (original) Light -storage self-luminescent glass according to claim 6, wherein the chemical formula of the light-storage self-luminescent material activated by multiple ions is:



wherein Ln is one or more selected from the group consisting of Pr, Ce, Dy, Ho, Nd and Er;

M is one or more selected from the group consisting of Sr, Ca, Mg and Zn; and

x and y are molar coefficients:  $0.0001 \leq x \leq 0.15$ ;  $0.0001 \leq y \leq 0.2$ .

9. (canceled)

10. (currently amended) Light -storage self-luminescent glass according claim 1, wherein the ~~conventional~~ common silicate glass consists of ~~following components~~ (by weight):

SiO <sub>2</sub> : 30-81%	CaO: 0.5-9%
Al <sub>2</sub> O <sub>3</sub> : 0-23%	MgO: 1-8%
B <sub>2</sub> O <sub>3</sub> : 0-15%	SrO: 1-10%
Li <sub>2</sub> O: 0-8%	BaO: 0-16%
Na <sub>2</sub> O: 0.6-18%	ZnO: 0.6-55%
K <sub>2</sub> O: 0.4-16%	PbO: 0-33%
As <sub>2</sub> O <sub>3</sub> : 0-0.5%.	

11. (canceled)

12. (currently amended) A process for producing the light-storage self-luminescent glass according to claim ~~[[11]]~~ 1, ~~wherein comprising:~~

doping the light-storage self-luminescent material ~~is doped~~ into the melted matrix glass to produce a mixture; and

forming the mixture ~~is formed~~ at 900-1300°C ~~during the forming process~~.

13. (currently amended) A process for producing the light-storage self-luminescent glass according to claim [[11]] 1, wherein comprising:  
re-heating and melting a glass which has been formed and cooled; ~~is re-heated and melted by a glass blower,~~ and  
doping the glass ~~doped~~ with the light-storage self-luminescent material before secondary forming.

14-15. (canceled)